# FOREIGN AGRICULTURE



August 1961

U.S. plant quarantine inspection

Cotton in West Europe's Textile Industry

How Tourists Endanger Our Agriculture

Our Dwindling Lard Market

UNITED STATES DEPARTMENT OF AGRICULTURE · FOREIGN AGRICULTURAL SERVICE

To report and interpret world agricultural developments

# FOREIGN AGRICULTURE

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## The Risks Are Greater

Every plant or livestock animal, every bit of produce that enters one country from another is, if contaminated, a threat to the agriculture of the recipient country. Man has long known this and, by erecting a barrier of inspections, inoculations, and quarantines, has succeeded amazingly well in checking the spread of plant and animal diseases and insects.

Today the risks are much greater because of modern air transportation. More people are traveling. Contaminated produce that used to wither or rot en route arrives fresh and viable. Also, planes are now coming down in unfrequented parts of the world and taking off again with cargo not listed on the manifest—animal-infecting insects for which no controls are known.

*Foreign Agriculture* is publishing two articles on the subject. In this issue, Ralph W. Sherman of USDA's Plant Quarantine Division writes how tourists—most of them unwittingly—endanger our agriculture.

He tells of the Miami school teacher who brought back coffee berries from Brazil to show her students how coffee grows. The berries were infested with the larvae of the Mediterranean fruit fly which twice before had made invasions into Florida citrus groves and cost the United States nearly $18 million to get rid of it.

Next month's article deals with the animal epidemics that are threatening Europe, the Middle East, and Asia—and poses the question, will the United States escape these plagues?

African horsesickness jumped from its South African source—presumably by plane—to the Middle East and Asia where it wiped out 200,000 to 300,000 horses and mules last year.

It is not a new disease, nor are the others which are now moving around the world. But they have made today's control methods inadequate and have spurred international organizations into setting up long-range projects to combat them.

### Cover Photograph

Passport in hand, traveler waits while the Plant Quarantine Inspector at Idlewild International Airport decides whether or not these cuttings of a South African silver tree are disease- and pest-free. (See story on p. 4.)

### Contents





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Promotion is a handy tool for cotton's drive to maintain a strong position on the West European market. German textile firms work with the German Cotton Institute on displays in stores and at trade fairs.

By BERNICE M. HORNBECK
Cotton Division
Foreign Agricultural Service

# Cotton Vs. Manmade Fibers in West Europe

For the past quarter century, the textile industry of Western Europe has been undergoing a quiet revolution in the sources and kinds of its raw materials. Although per capita cotton consumption has gone up since prewar, cotton now supplies a smaller share of the industry's raw-material needs; manmade fibers, a larger share. As a result, Western Europe's total cotton imports have gone down; so have its imports of cotton from the United States, both in quantity and in relation to the total.

These decreases are matters of concern to U.S. cotton growers and exporters, for Western Europe—the world's largest import market for cotton—has been an important customer for U.S. cotton during more than a century and a half, and takes about half our cotton exports. Before World War II, the area's total cotton imports averaged about 7.9 million bales a year; the average for 1955-59 was only 7.1 million—10 percent below prewar. Meanwhile, U.S. exports of cotton to the area dropped from a prewar average of 3.4 million bales to a 1955-59 average of 2.8 million bales. This was a decline of 18 percent. At the same time, the U.S. share of the total slipped from 43 percent to 38.

## Import Shifts

For the shrinkage of total West European cotton imports, several reasons present themselves. One is the tougher competition that West European exports of cotton textiles are meeting in their traditional overseas markets, from the rise of new textile industries there and the expansion of older ones, as well as from low-cost Asian suppliers. Tougher competition has sprung up also in the home area, where the West European textile producer has traditionally sold by far the largest part of his output. Recently, the volume of West Europe's textile imports from low-cost sources has been unprecedented.

The United States is still the largest single source of supply for Western Europe's cotton imports, but it must compete with a number of other producing countries, including those within Western Europe itself—some of which are relatively new exporters.

In addition, four of the area's cotton-consuming countries — Belgium, France, Portugal, and the United Kingdom—have long had close trade ties with associated African areas that are cotton producers. Since the war, Belgium has received about a third of the Congo's cotton exports; France, about 90 percent of those from French Africa; Portugal, nearly all the cotton production of Mozambique and Angola; and the United Kingdom, between 20 and 40 percent of the cotton exported by its African associates. This flow of cotton has been encouraged by various favored trading arrangements with the overseas areas; and it has been exempt from the foreign exchange difficulties that hampered early postwar trade with other cotton-exporting countries.

These exchange difficulties have fostered bilateral trade arrangements, under some of which West European countries have increased their takings of cotton from certain countries in order to find markets for their manufactured items.

## Competition From Manmade Fibers

Within the framework of changing trade patterns both for cotton textiles and for raw cotton, the commanding position that cotton has traditionally held in the European fiber market has been challenged by some vigorous newcomers to the world of textile fibers.

Before World War II, the production of manmade fibers—mostly various kinds of rayon—though rather

*(Continued on page 14)*

# How Tourists Unwittingly Endanger Our Agriculture

By RALPH W. SHERMAN
Plant Quarantine Division
Agricultural Research Service

A Miami school teacher returning from a vacation spent in South America entered Customs at the Miami International Airport with a handbag in which were neatly tucked several leafy sprays hung with red berries. When the Plant Quarantine Inspector told her that she could not bring them in, she was somewhat incensed. She had selected these sprays from coffee plants in Brazil and was bringing them back to show her class how coffee grows.

A quick glance at the berries had told the inspector that they contained insect infestation. Later when the berries were closely examined, they were found to contain 58 larvae of the Mediterranean fruit fly, the destructive citrus pest that twice had made incursions into Florida, necessitating expensive campaigns to eradicate them.

Such incidents are quite common and always have been. But with more people going abroad every year, either as tourists or on business, the problem has become a very serious one. In 1960 well over 4 million persons entered the United States at the Nation's international airports and another million at its steamship ports. Twenty years ago, only 30,000 ships were inspected and only 5,300 planes.

This travel boom has placed a tremendous burden on our Plant Quarantine Inspectors. During the year ending July 1, 1960, there were over 300,000 interceptions of plant materials and, of these, over 30,000 were either diseased or infested with dangerous insects. This averages a potential threat to U.S. agriculture every 17 minutes.

### Only A Few Smugglers

The temptation to stow away in a suitcase an interesting plant, a few bulbs, or some especially nice fruit and vegetables is usually quite innocent, with no real intent to smuggle in forbidden goods. With air travel across the Atlantic reduced to 6 hours by jet, it seems so easy to bring home a few tulip bulbs from Holland or an unusual shrub. Furthermore, because of this quick crossing of oceans, fruits and vegetables enjoyed abroad can be brought home to be served fresh on the family dinner table. People even try to bring in meat products—that sausage that tasted so good in Vienna, the appetizing salami from Italy.

Not all tourists are guiltless. There was the case of the middle-aged Oklahoma doctor and his wife who returned from a Mexican motor trip via Laredo, Texas. The car had been almost cleared by a Plant Quarantine Inspector when a small orchid plant was discovered, leading to a thorough search. This netted 8 more orchid plants, a mango, and some orchid and tree seeds, all concealed about the car, in luggage, and on the persons of both husband and wife.

Customs then assessed a fine of $15.00 to cover the undeclared materials. However, the inspector was pleasantly surprised when the doctor congratulated him on his thoroughness. He added that he had expected to be waved through without inspection. Very fortunate it was that the seeds were detected, for a later examination disclosed parasitic wasps.

Back from Hawaii, tourist watches as the inspector seals her luggage after checking for plant materials and fruit.

### Some Admitted

Many of our well-known plants came from abroad. Before the U.S. Plant Quarantine Service was established in 1912, immigrants often brought cherished plants from their home country; and there were travelers who went abroad on plant-exploration trips to bring home exotic flowers and trees for their gardens.

Our azaleas, for instance, came from Japan. Apples are natives of southeastern Europe and southwestern Asia. Callas came from Africa, the eucalyptus from Australia, and weeping willows from China.

It is not the intention of the Plant Quarantine Service to prohibit insect- and disease-free foreign plant materials from entering the United States. In recent years, our bill for imported nursery stock and plant materials has totaled around $14 million a year. These shrubs and plants, however, are brought in commercially, through the proper channels, and in accordance with quarantine regulations of the U. S. Department of Agriculture.

The tourist is not usually familiar with these regulations, nor is he aware of the fact that, while air travel permits bringing home plants and produce without deterioration, it also aggravates the problem. When intercontinental travel consumed a couple of weeks or more, fruits and vegetables usually rotted and were discarded en route. Plant materials withered and dried up so that the chance of either insects or disease surviving was slim. Now such items arrive as fresh as though just purchased in a garden shop, and if they harbored any disease or pest at the start of the journey, these still exist to endanger our gardens and orchards.

### Informing the Public

To prevent the hard feelings caused by the often very necessary confiscation of plants and other agricultural products, the Plant Quarantine Service has embarked upon a campaign to explain to United States-bound travelers their responsibility to our agriculture —and to gain their cooperation.

Educational activities are now under way that are aimed at catching the attention of the traveler before he embarks for the United States. Being forewarned, passengers can avoid stowing away in their luggage the prohibited plants and produce only to have them confiscated upon arrival.

Being given the widest distribution is a small flier, with a brief, pithy narrative printed in English on the face and repeated in French, Spanish, and Italian on the reverse side. Airlines and steamship companies hand this flier to passengers as they check in for international flights and cruises, placing them in ticket folders when convenient. The message can't be missed, for it's headlined "Don't Help Hitchhikers."

In addition, the Passport Office of the U.S. Department of State is distributing to passport applicants copies of a general brochure on the danger of bringing in foreign agricultural pests and diseases; and U.S. agricultural attaché and consular offices around the world are also participating in this drive to safeguard our crops and livestock by supplying quarantine information to travelers and exporters.

Above, a foreign-grown orange brought to Washington, D.C., airport by plane is examined for fruit fly. Right, before produce can be brought across the Mexcan border it must be carefully checked.


Cars from abroad must be steamwashed but this Detroit inspector is making sure that no foreign soil still clings to the underpinnings.

# Poland's New Economic Plan Sets Up High Farm Goals

**Agriculture figures largely in Poland's fourth multi-year economic Plan. The government seems disinclined to upset farm gains by stepped-up socialization.**

By ALEXANDER BERNITZ
Regional Analysis Division
Economic Research Service

The Sejm, Poland's national legislative body, passed a resolution on February 17, 1961, outlining economic goals over the next 5 years. Primary objectives were to develop productive forces to build the socialist system in Poland, improve living levels, and further diminish the economic gap between Poland and more highly developed European countries.

This current 5-year plan specifies production targets, investment outlays, and other aspects of economic development for all sectors of the economy.

The gross national product, which by Polish definition does not include value of services, is to increase 40 percent from 1961 to 1965. This includes a 52 percent increase in industrial production and a 22-percent one in agricultural production. Special emphasis will be placed on the intensive expansion of the metallurgical, chemical, and building materials industries, and a considerable increase in investments for agriculture.

The plan forecasts an increase of about 750,000 in the Polish labor force and a 40-percent rise in labor productivity. Also, it calls for a 23-percent increase both in consumption and real income per employed person.

Although realistic for many sectors of the economy, the plan envisages an optimistic agricultural development.

## High Agricultural Goals

From 1961 to 1965, $4.8 billion is to be invested in agricultural development, approximately double that of the previous 5-year plan. By 1965, increased agricultural production is to provide improvement in domestic food consumption, increased agricultural exports, and the basis for eliminating grain imports by 1970. A proposed 16-percent increase in crop production and a 31-percent increase in animal production will up overall agricultural production by 22 percent.

The plan calls for 691,000 more acres of sown land, or 2 percent more than in 1960. Use of commercial fertilizer in 1965 is to be stepped up 65.5 percent above the 1960 level, and plant protection media, fungicides, insecticides, etc., are to go to 110,000 tons, or up 13 percent.

Other higher agricultural inputs are mechanization, land improvement, and rural construction. The value of farm machinery supplied during the 5 years will total $1.25 million, or approximately double the amount in the previous 5 years. By 1965 the supply of tractors will be 135,000 units, including 27,000 units to be owned by collectives. Land improvement, irrigation, and drainage projects are to be completed on 3,410,000 acres compared with 1,359,000 acres during the previous 5 years. Farm building construction will be of a larger volume and oriented to the development of mechanized agriculture. By 1965, 10,000 additional villages will have electricity, bringing the total to 80 percent.

The foodstuffs industry, in response to the larger agricultural production, is to process 52.3 percent more fresh meat (liveweight slaughter basis) as compared to 1960, 112.8 percent more processed meat, including canned hams, 66.2 percent more cream butter, and 62.2 percent more margarine. By 1965, per capita consumption should include 9.1 kilograms more meat and animal fats than in 1960, 29.0 kilograms more dairy products (excluding butter), 0.7 kilogram more butter, and 6.7 kilograms more sugar.

Agricultural exports are to expand 55.5 percent by 1965. Principal exports are bacon, processed meat, butter, eggs and egg products, and poultry meat. Agricultural imports are to remain at about the same level throughout the period but their share of total imports will decrease by about 4 percent. The increased need for animal feeds due to the larger livestock numbers is to be met primarily from increased domestic production and not from any increase in imports, although approximately 8 million tons of grain will be imported during the 5 years.

## Socialism Played Down

Aside from outlining the specific goals of state-owned farms and insuring the profitable operation of all collectives and state farms by 1965, the plan makes no comment on further socialization of agriculture.

W. Gomulka, Polish political leader, recently stated, "In accordance with the will of the peasants, the future of agriculture will belong to production cooperatives." Thus, it can be expected that the moderate government policy of promoting Agricultural Circles, "voluntary" producer cooperatives, will continue. The Polish Government seems reluctant to disrupt recent agricultural gains by imposing more strict socialization upon farmers.

Although 1961-65 agricultural production goals are high, in a socialist state the multi-year plan serves primarily as guide and incentive for the people. The 1961-65 economic plan of Poland will undoubtedly be modified during the next few years in line with actual agricultural growth.

POLAND'S 1965 FARM OUTPUT GOALS

| Item | Unit | 1965 planned | Percent 1965 of 1960 |
|---|---|---|---|
| Total grains | 1,000 tons | 15,560 | 105.2 |
| Sugar beets | 1,000 tons | 11,400 | 111.5 |
| Oilseeds | 1,000 tons | 227 | 140.5 |
| Potatoes | 1,000 tons | 41,850 | 110.8 |
| Total meat (lwgt.) | 1,000 tons | 2,855 | 132.8 |
| of which, pork | 1,000 tons | 1,975 | 136.9 |
| Milk | Mil. liters | 15,250 | 128.0 |
| Eggs | Mil. pieces | 7,000 | 126.7 |
| Cattle | Thousands | 10,500 | 120.8 |
| Pigs | do. | 15,500 | 118.9 |

# Our Dwindling Lard Markets

By DWIGHT R. BISHOP
Livestock and Meat Products
Foreign Agricultural Service

The United States is in a peculiar position with regard to lard. Last year it shipped abroad 620 million pounds—nearly a quarter of this country's lard production and 69 percent of the world's trade in lard. Most of it went to two countries—the United Kingdom and Cuba Together they took 87 percent of our lard shipments.

This is quite a reversal of the situation that prevailed 5 to 10 years ago. At that time, the United States was shipping less lard—an average of 555 million pounds for 1951-55—but it went to more countries and was more evenly divided among them. The Netherlands, for example, averaged 33 million pounds for the 5-year period, whereas last year the figure was down to 1 million. West Germany, with a 56-million pound average for 1951-55, dropped to 16 million last year, and Yugoslavia, which had been buying around 38 million pounds of U.S. lard, took none at all.

Lard is, of course, a commodity that fluctuates. Because hog production tends to increase for 2 to 3 years and then decrease for 2 years, exports vary considerably from year to year. U.S. lard producers expect this. What concerns them now is not our lard supplies but the narrowing-down of our foreign outlets as a result of the greatly expanded production abroad and the increasing number of trade barriers.

### 1960 Trade

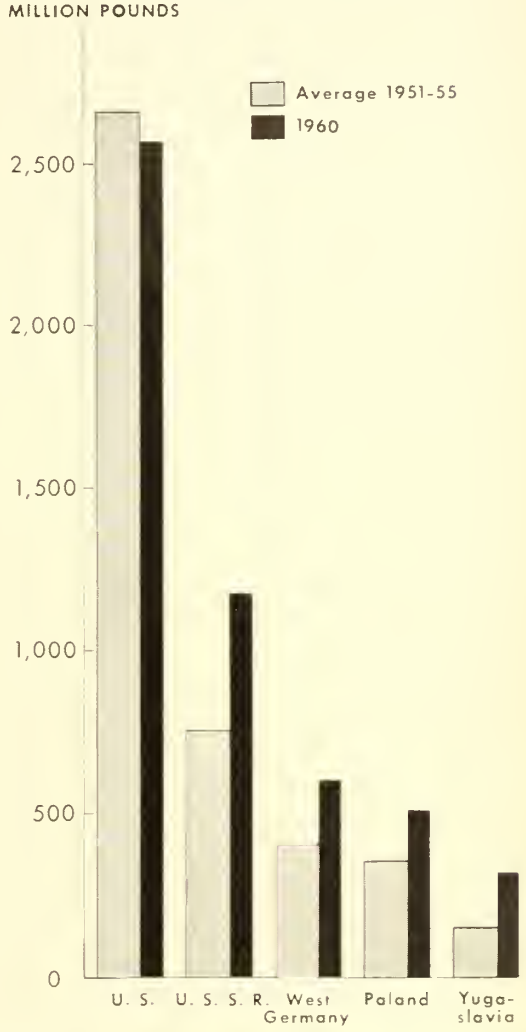
Last year's output of lard in the major producing countries was estimated at 7 billion pounds—3 percent below the 1959 total but 20 percent above the 1951-55 average. Most of this increase occurred in the USSR and in European countries, particularly in Western Germany, Poland, and Yugoslavia.

Western Europe's production reached a record level of 1.2 billion pounds in 1960—a 36-percent increase over the 1951-55 average; and the Soviet Union's, also 1.2 billion pounds, represented a 56-percent rise. In the United States, which is by far the leading lard-producing country, the 2.6-billion-pound output was considerably below that of 1959 but close to the 10-year average.

The marketing picture showed some very definite changes. The Netherlands, which accounted for 13 percent of the world lard trade, has almost doubled its exports in the past 5 years. France, which has become an important exporter only in the last 4 years, last year ranked third as an exporter, with 10 percent of world trade.

Despite smaller U.S. production, exports were up—mainly because of the United Kingdom's extensive purchasing. The opening of the St. Lawrence Seaway has made it possible for U.S. lard to move in bulk-tank shipments from Chicago to packing plants in England for

World Lard Output Rising




U. S. Lard Markets Abroad: A Comparison Between 1951-55 and 1960

| Country | Average 1951-55 | 1960 | Country | Average 1951-55 | 1960 |
|---|---|---|---|---|---|
| | *Mil. lb.* | *Mil. lb.* | | *Mil. lb.* | *Mil. lb.* |
| United Kingdom | 125 | 349 | El Salvador | 4 | 3 |
| Cuba | 157 | 190 | Bolivia | 4 | 3 |
| Canada | 6 | 21 | Peru | 13 | 1 |
| West Germany | 56 | 16 | Netherlands | 33 | 1 |
| Mexico | 32 | 9 | Yugoslavia | 38 | -- |
| Haiti | 7 | 8 | Austria | 24 | -- |
| Costa Rica | 7 | 4 | Other countries | 41 | 12 |
| Guatemala | 8 | 3 | Total | 555 | 620 |

slightly over 1 cent a pound; and when the Seaway is closed for the winter, tankers leave from New York and New Orleans. The result has been a big jump in lard exports to the United Kingdom—349 million pounds last year compared to the 125-million average for 1951-55. This compensated for our lower exports to other countries, including the 27-million-pound drop in sales to Cuba last year.

### Prospects for 1961

World production of lard will probably increase this year as hog slaughter expands both in Europe and the United States. Exports, however, are not expected to equal the high level of 1960. Already smaller supplies and higher U.S. prices have reduced our lard exports, which in the first 3 months of this year were 65 percent below the corresponding period of 1960.

There was a sharp decline in exports, both to Cuba and the United Kingdom. Trade with Cuba is unlikely to show much improvement because of the break in diplomatic relations—in fact, it will probably fall off further—but our lard trade with the United Kingdom should pick up. U.S. prices have now dropped sharply, a situation that should shortly result in greatly increased shipments there.

As for our European markets—U.S. lard is facing tough competition. Also, in time this market may cease to exist. The European Economic Community (the Common Market) is planning to increase the external tariff on lard from 10 percent to 20 percent, a move which would price U.S. lard out of the market. Already the Common Market as a whole is a net exporter, with West Germany the only substantial net importer and with the Netherlands and France becoming bigger exporters each year. Even with the present duty of 10 percent, U.S. exporters are feeling the pressure, and they will feel it more as the internal EEC duty on lard is gradually reduced to zero.

Japan may also become a relatively unimportant lard market. In 1960 Japan took 314,000 pounds of U.S. lard compared with 10,000 pounds the previous year. But in July of this year, the Japanese Government raised its

*(Continued on page 14)*

# Australia To Expand Beef Exports Via Long-Range Transportation Development

A massive transportation development program scheduled for north Queensland and the Northern Territory will greatly increase Australia's exports of beef, coal, minerals, and steel. Officials estimate that new highway construction alone could raise annual export figures by $39 million.

The program, to be a cooperative venture between the Commonwealth and the States concerned, involves Commonwealth financial assistance for projects that are essential to the promotion of export commodities but too costly for a single State. Transportation is one of Australia's major problems. Because many areas have no surfaced highways and only a small part of the country is directly accessible by rail, it is extremely difficult for export industries to bring in supplies and equipment and to move their products out to coastal processing plants and export centers.

For the beef industry, transportation is crucial. The shortage of motorable roads means that most cattle must be moved overland on the hoof—feeder cattle must be driven from breeding areas in the north of the continent to natural grassland areas in the center and southeast, and fattened cattle to market or slaughtering points on the east and south coasts.

So great are the distances involved that Australia's stock routes are among the longest in the world—one more than 1,000 miles, others close to or over 800. These long walks take many weeks and are costly both in labor and in loss of weight by the animals Even under ordinary circumstances, most of the cattle moved such distances have to be marketed as feeders and fattened before they can be slaughtered. Under bad circumstances, such as prolonged drought, losses are heavy.

An added complication is the gradual retirement of old-time drovers with long experience in "overlanding" cattle. Few young drovers are coming along to replace them. Another problem is the provision of water and grazing along the stock routes—a financial burden on the State Governments and an impossibility in major droughts.

In the upper part of Western Australia, sheer necessity has forced the development of motor transport for cattle. This area is so extremely remote from the eastern fattening areas that stockmen are obliged to fatten their cattle locally. To keep droving at a minimum, roads have been improved; and trucks now move more than two-thirds of the 18,000 head of cattle that go annually to meatworks at Derby and Broome. The hope is that truck transport will eventually become possible throughout the north.

Looking toward this goal, work is to begin shortly on one highway project that will greatly assist the combined road-rail movement of young cattle in Queensland, from the "Upper Gulf" breeding country of the north to fattening areas in the center and southeast. This project involves the surfacing of a major dirt road from Normanton near the Gulf of Carpentaria to Julia Creek on the Mt. Isa-Townsville railway (which runs from the east coast nearly across the State). Of the $2.25 million the work will cost during this fiscal year, the Commonwealth has contributed $1.5 million.

In addition, substantial agreement has been reached on a great $45-million project for 4,200 miles of hard-surfaced roads linking major breeding and fattening districts. These roads include a highway from Camooweal in northern Queensland to Bourke, a rail terminal in New South Wales; a network in the "Channel Country" (a vast basin of natural pastures at the junction of Queensland, New South Wales, and South Australia), giving access to railheads in Queensland; and access roads in the Northern Territory, from the port of Darwin and from the road-rail terminal at Alice Springs.

Recently, too, the Commonwealth and Queensland Governments agreed on the need for the rehabilitation of the Mt. Isa-Townsville railway, a key line for minerals and cattle. When completed, at an estimated cost of $67 million, this will be a first-class route for moving cattle at high speed.

Elsen photo

Below, spraying vineyards from airplanes is one of many improved practices that have increased France's grape production. Left, harvesting grapes, Burgundy.

Courtesy Institut Technique du Vin

# France and Its Wine

**The leading French agricultural export, wine brings in the biggest share of France's farm income—even more than wheat.**

By PAUL G. MINNEMAN
U.S. Agricultural Attaché, Paris

No country in the world is as famous for its wines as France, and this fame goes back many centuries. When Julius Caesar invaded Gaul nearly 2,000 years ago, his legions found hillsides terraced with vineyards and wines of a quality they had never met with before. Ever since, wine has been important in French life—to the consumer, to the producer, and to France's national income and foreign trade.

Wine is the Frenchman's traditional beverage. It is also used in cooking, and distilled into cognac and liqueurs. And because ordinary wine is relatively inexpensive—only about 20 cents to 25 cents a bottle—the French drink a lot of it. Although France's per capita consumption is now somewhat lower than before World War II, it is still the highest in the world —slightly over 135 quarts a year.

In foreign trade, wine is a big item. It is by far France's most important agricultural export, amounting to $200 million in 1960, and exceeded by only two industrial items, autos and metals.

Regular wines make up about two-fifths of the value of French wine exports, and champagne, vermouth, and brandies distilled from wines, three-fifths. Nearly half of the champagne produced is exported and nearly three-fourths of the cognac.

The value of these exports is increasing steadily, as they are sent all over the world. The United Kingdom is the largest single market, with Germany second, and the United States in third place. Exports to the United States amounted to over $27 million in 1960; brandies led in value, followed by wines and champagne.

## France—A Wine Importer

It is not surprising that France is a leading exporter of wines but few realize that France itself is the world's largest wine importer. It imports five to six times more wine than it exports. Imports supply fully one-fourth of the consumption, while only about 7 percent of the volume of the French wine production is exported. Furthermore, imports are between 300 million and 400 million gallons a year, while exports are only 50 million to 100 million. Most of the imports, however, are from Algeria, which is closely tied to the French economy.

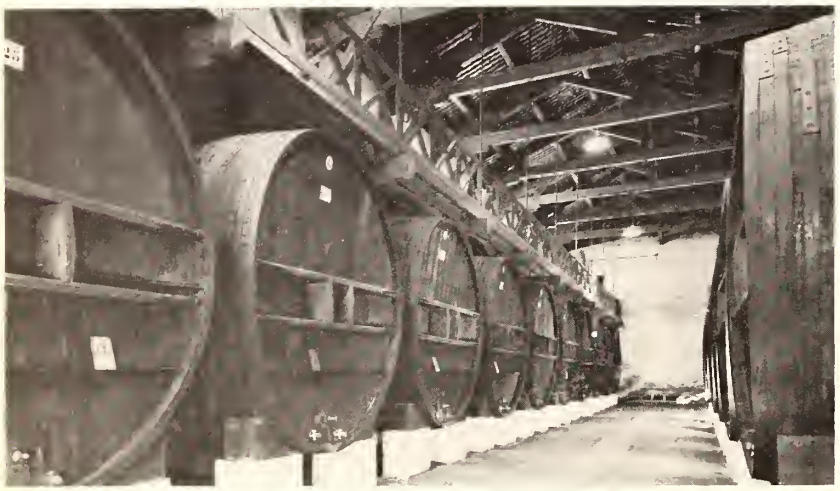
Imports are largely the ordinary low-priced wines and, since exports consist primarily of the expensive products, the value of the large imports actually is only a little greater than that of the much smaller exports.

## Biggest Income Crop

In the French economy wine is of greatest importance to the farm group. Three out of every five French farmers grow wine grapes, and out of about 2.2 million farmers in France, 1.5 million have vineyards. The total area in vineyards is nearly double the area in potatoes, and one-third as large as that in wheat, the main French crop.

Grapes for wine are even more valuable than wheat in terms of farm income, in that they total nearly three-

Left, aerial "carts" in French winery move grapes from receiving point to crusher (above). Below, wooden casks in which wine is aged, Bezien.



fourths of a billion dollars annually. To about 1 million small French farmers their vineyards are a supplemental crop that brings in some $200 to $300 of additional income a year. These small vineyards, however, produce less than a quarter of the total wine production; about half the total production is from the 10 percent of the growers who have several acres.

Particularly significant is the fact that the total area in vineyards now is less than two-thirds as large as it was 100 years ago. Nevertheless, improved methods and varieties have sharply increased the yields which now average about 350 gallons per acre.

Some wine is produced commercially in nearly every region of France, except along the cool northwestern coast. By far the greater part, about a half, is from the warm, small-farm regions near the Mediterranean, in southern France. Some high-quality wines, however, are produced in the eastern part of the country, i.e., Alsace, Champagne, and Burgundy, and in the Bordeaux region in the southwest.

### Government Control

About 80 percent of all the French wine is classified as "Vin Ordinaire," and only about 20 percent is considered to be superior or fine quality. Exports consist almost entirely of these higher-quality wines which sell for much more than ordinary wines.

The best are called wines of "Appellation Controllée," i.e., certified as to the exact place where they were produced, and protected by law. The next quality group is known as "Qualité Supérieure." Qualities, of course, also vary widely from year to year depending largely on the amount of sunshine. The alcohol content varies too, from 9 percent to 14 percent, but averages about 11 percent.

The government exerts other controls over the wine industry, besides that of labeling. Any increase in vineyard area on farms is prohibited. Varieties are recommended, and nurseries controlled. Production must be reported. Minimum and maximum prices are fixed for ordinary wines, taxes are levied, and stocks regulated.

Also, in an effort to reduce the production of inferior wines, the government has authorized the payment of subsidies for removing low-quality vineyards. In the 2 years—1954 and 1955—when a subsidy has been paid, it has totaled around $17 million for destroying some 50,000 acres.

These safeguards have paid off. Other countries around the world produce fine wines, but to many people the word "wine" is automatically associated with France; and should it ever cease to be, the nation's farmers and the national budget would suffer from serious financial trouble.

These bustling shoppers in a corner of a big Italian market are representative of the increasingly prosperous buying public in Italy that is being courted by the big exporters like the United States.

By RANDALL STELLY
JAMES E. KIRBY
Agricultural and Mechanical College of Texas

# Market Development in Italy
## —some of its problems and achievements

Italy is a land of great contrasts. The very new intermingles with the very old; modern business and production methods are sometimes side by side with those of feudal origin. But striking sharply across these divergencies is Italy's determination to be a contributing part of the modern world through a better, more intense application of its resources. An early result of this drive is a strong demand for a higher standard of living and a better diet.

It is in this area of demand for a better diet that the U.S. market development program coincides with Italy's own economic effort. Many of the farm products that Italians are increasingly eager to buy, we in the United States have in excess supply. Traditionally, we have already furnished these items; we would like to increase our sales to Italy and make it a continuing market.

Part of the answer as to how to do this lies, of course, in access to the market, and that has been limited by import restrictions. But a large part too lies in three areas which are common knowledge to competent businessmen everywhere: price, quality, service. A close look at our sales record in Italy reveals that in price U.S. farm products are competitive, but in quality we have often failed to fulfill the buyer's needs, and in service we have sometimes left much to be desired.

As a result of market development operations under Public Law 480, U.S. agriculture now has a better understanding of the needs of the Italian market, and work is being done to assure the Italian importer that the quality he orders will be delivered, as well as to improve the mechanical functioning of the marketing system. In service, the United States has much to offer by way of technical advice on better use of its imports.

How the U.S. Foreign Agricultural Service and cooperating U.S. industry groups are going about the job of developing farm markets in Italy can be seen by a closer look at five specific commodity programs.

### Cotton

The market development program for cotton benefits from the wealth of background experience possessed by the cotton promotion group in the United States. The Cotton Council International represents the more cosmopolitan aspect of the group; that is, it has directed its efforts to increasing the consumption of cotton in general. Statistics indicate that these efforts are meeting success. The per capita disappearance of textiles in Italy is increasing, and cotton is more than holding its own against other fibers, with a consumption of 8 pounds per capita in 1959. However, compared with per capita cotton disappearance in other countries of Western Europe, Italy's is still low. Thus, there is much room for increases.

Consumption of U.S. cotton in particular is another story, and a complex one. Italian mills have a long history of utilizing raw cotton grown in other countries, for Italy's own annual production is only 35-40,000 bales of 500 pounds each. Over the years, cordial relationships have been developed between U.S. cotton export firms and Italian merchants, importers, and textile mill owners. Yet Italy's cotton imports from the United States, which amounted to 69 percent of total cotton

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This is the last of a series of articles summarizing evaluation reports made by three universities on the U.S. market development program. The complete report by Professors Stelly and Kirby is being published by the Agricultural and Mechanical College of Texas.

imports in 1957-58, dropped to 36 percent in 1958-59.

Competitive pricing and improvement in the average quality of our stocks have now increased the U.S. share. However, there are a number of technological and marketing problems still to be solved between U.S. exporters and Italian spinners. These factors have no great influence on the overall effectiveness of the cotton promotion program, but they may vitally affect the U.S. share of the market.

### Poultry

Chicken is considered a delicacy on the Italian menu, as well it might be, in view of its cost. Prices in the wholesale markets range from 33 cents per pound for battery-fed (mass-produced) birds to 69 cents for yard-fed fryers, New York dressed (with only the feathers removed). Retail prices are correspondingly higher. Because refrigeration is almost totally lacking in Italy's retail outlets, the New York dressed bird is preferred; the Italian housewife likes her bird's head left on, so that she can judge by the condition of its eyes how recently it was killed. She also likes its feet left on, so that she can tell by their shade of yellow whether it was properly fed (on the highly pigmented La Plata corn from Argentina that Italian poultrymen prefer).

The U.S. poultry market development program, however, was built around a very different product—the frozen, eviscerated bird, completely ready to cook. It will take time to convince the Italian housewife (not conditioned, as her American counterpart is, by long and favorable experience with frozen foods) that this product can really be fresh and dependable. It will also take many retail outlets equipped to handle the product.

In line with their increased consumption of all protein foods, Italians are eating more poultry; per capita consumption went up from 2.9 pounds to 7.5 between 1951 and 1959. Imports of poultry meat increased until 1955, and then declined.

This import decline could reflect a situation of considerable importance to the market development program for U.S. poultry; that is, the growth of the Italian poultry industry. Despite a traditional consumer preference for the small, sharp-breasted, farm-grown bird from Tuscany, more and more Italian poultrymen are producing—and more and more housewives buying—the American type of broad-breasted chicken, lower priced because "factory-grown" in large establishments. Both Italian and American money is being invested in operations of this type, using American-bred chicks. A few modern processing plants are even bringing out chilled eviscerated poultry for a select retail trade. As the number of freezer-equipped retail stores increases, the net result is bound to be a wider public acquaintance with this product. This could increase the possibility of poultry imports from the United States.

### Soybeans

Soybeans are envisioned by many as the "wonder bean" that can provide the low-cost protein needed by the world's millions to upgrade their diet. Much of this enthusiasm for soybeans and their products has been generated by the missionary work of the Soybean Council of America. The effect of their labor shows dramatically in Italian soybean and soybean-product imports: In 1954-55, less than 12,000 tons; in 1959-60, about 270,000.

The soybean is well adapted to the needs of the Italian market. In the past, Italians satisfied their requirements for edible vegetable oil mainly with olive oil; at present, that oil supplies about half the need. The growth of the population and an increased use of edible oil, plus a lower price, have stimulated the acceptance of soybean oil as a supplement.

Soybean meal or cake has likewise found a ready acceptance in Italy. The Italian Government's encouragement of livestock production has helped expand the market for this valuable feedstuff; and the Soybean Council and FAS have given the Italians technical advice on using the meal in feed.

### Wheat

Wheat is the staple crop of Italy; of the nation's 39.5 million acres of arable land, 30 percent is devoted to its production. Italy has a population density of 420 persons per square mile, and its need for food is well demonstrated by the marginal type of land included in the wheat area.

The program to upgrade the Italian diet by increased production of protein is directed largely at the producer of soft wheat in northern Italy. Because his product is in surplus—Italy's import demand is for hard wheats—and because of his area's more favorable climate and more productive soil, he can turn to alternative crops.

Trends in the demand for wheat products indicate that it will continue steady to strong. The demand for pasta, including spaghetti, reached an alltime high of 68 pounds per person in 1959. Thanks to market development efforts, this demand now represents an opportunity for U.S. wheat. In the fall of 1956, Italian pasta manufacturers visited the United States under the auspices of the market development program. The demonstrations they saw on the use of high-quality Hard Red Winter wheat in a blend with durum brought increased use of this wheat for pasta.

There has, however, been concern among market development specialists over the quality of the product being shipped by U.S. exporters. Because U.S. grades and standards on wheat do not directly reflect protein quality, there have been instances where the shipment did not do the job desired. Since quality control is so important in blending, much work is being done under the program to help buyers procure wheat to specifications.

Market development work for wheat has paid off in Italy. The United States now furnishes 62 percent of Italy's import needs, as compared with 3 percent in 1954. This increase exactly matches the period during which the P.L. 480 program has been in effect. But the real test of whether a continuing market had been created came in the fall of 1960, when Italy made substantial wheat purchases from the United States with hard currency.

### Feed Grains

Feed grains are the biggest question mark in the Italian market development program. Although only a small measurable gain has been made, in many ways the market potential is most promising.

The Italian Government is making a

strenuous effort to develop the livestock industry. What will be the pattern of transition from wheat to feed grain or forage to support the expected increase in animals? The amount of grain needed will depend on efficiency of land use and the type of animal fed.

So far, an indication of the general change that is taking place comes from the fact that corn imports increased over 5 times from 1955 to 1959. Each year of the market development program has seen the United States furnishing a smaller percentage of Italy's total corn imports; but the results of the program have been evident in other ways. Much effort has been expended to acquaint Italian farmers and feed manufacturers with yellow hybrid corn and grain sorghum. Now the production of this corn in Italy is increasing sharply; grain sorghum has also been introduced as a crop and is gaining popularity. More familiarity with these two feedstuffs should broaden the market for them.

Strong efforts have also been made to obtain the removal of import restrictions on feed grains; and in December 1960 these restrictions were lifted for 6 months on all except grain sorghums. If this temporary removal becomes a permanent policy, the door will be opened to still more productive market development work.

### What's Ahead

The market development program in Italy has made real progress in determining the needs and limitations of the Italian market for U.S. farm products. But attempts to develop permanent and satisfactory markets for U.S. products—especially in hard-currency areas—will bear fruit only if U.S. exporters remain competitive in price, quality, and delivery terms and conditions, and if they furnish the added services the foreign utilizer may desire. Need for qualified commodity personnel to supervise and coordinate cooperating groups in the foreign country cannot be overemphasized.

As the market becomes better established, the program in Italy should become increasingly self-sufficient financially and even more important to U.S. producers. Certainly this program is having a distinct effect in enlarging the market for U.S. agriculture.

# Bulgaria May Reach 1961 Farm Goals Given Farmer Incentive and Weather

Goals for Bulgaria's fourth 5-year economic plan have not yet been revealed, though annual goals announced for 1961 are expected to constitute those for the first year of the plan.

The 1961 plan continues to emphasize industry. The state plans to put $751 million into industry (an increase of 18 percent), $108 million into agriculture and forestry (37 percent less than in 1960). Investments by collectives and state long-term loans, however, will bring the share of agriculture and forestry to $491 million.

In general, Bulgaria's agricultural targets for 1961 have the dual purpose of satisfying both domestic and export needs. An important part of domestic needs is providing supplies for the food processing industry.

Bulgarian agriculture may succeed in reaching these goals, because they do not appear to be unrealistic. The outcome will depend, of course, on the weather and on the government's ability to enlist the farmers' cooperation by adequate incentives. However, although Bulgaria announced that overall economic goals for the 1958-62 plan had been achieved two years ahead of time, production had not even reached goals set for 1960.

Reportedly, some crop yields increased in 1960 over 1959. However, targets for important export crops like tobacco, vegetables, and grapes were not met—even though weather conditions were not abnormal, though not as good as in 1959. Cotton, bread grains, meat, and some types of livestock, also fell short.

Principal means employed to build farm production in 1961 will be extensive and selective land cultivation, as well as increased irrigation, use of fertilizer, and mechanization. Almost half the fallow land will be cultivated, as will many plots now uncultivated.

Particular emphasis, also, will be placed on increasing the number of cattle and animal productivity not only in the socialist sector, but also in the private possession of collective members. Animal production is considered a bottleneck in Bulgaria's agricultural progress. Increases scheduled for 1961 are large, but are not likely to improve significantly the Bulgarian's low consumption of animal products.

Fodder crops, therefore, will be planted on a larger percentage of arable land than heretofor. Meadows and pastures, particularly in mountainous areas, are to be better utilized. The aim is that, during 1961, fodder in terms of nutrition units will reach 92 percent of requirements, compared with 85 percent in the 1960 plan.

Acreage devoted to cereals will be extended by about 180,000 acres over the 1960 area. This is principally an effort to halt the import of cereals which in 1959 included 150,000 tons of wheat and 74,000 tons of corn.

Expansion is due for areas sown to tomatoes, onions, other vegetables, and some fruit.

Areas sown to sunflowers and cotton are to be cut by 35,000 acres each. Behind this move is the decision to retire marginal lands hitherto planted to these crops in favor of a smaller amount of more productive land.

Irrigated areas are scheduled to increase by 17 percent in 1961 over 1960; the use of commercial fertilizers, by almost 13 percent.

An additional 6,000 tractors to be delivered in 1961 will bring the total number to 45,890 (in terms of 15 hp).

Six new machine-tractor stations will be set up in mountainous areas. The supply of other farm machinery also is to increase.

The volume of production in the food industry is expected to rise 8.5 percent over 1960—in particular, meat production by 20.7 percent and canned vegetables by 21.9 percent. A new plan for distributing raw materials to the canning industry will attempt to rectify the failure of many areas in 1960 to supply processors fully.

In 1961, textile production, of which cotton is the most important, is expected to be about 3 percent less than in 1960 because of a better stock position. Almost half of Bulgaria's raw cotton is imported, chiefly from the Soviet Union, as is some wool.

## Europe's Textile Industry

*(Continued from page 3)*

widespread, was especially important in Germany and Italy, and these fibers were clearly thought of as substitutes for natural fibers.

After the war, the production of manmade fibers increased in all major textile producing countries in Europe. Most West European governments encouraged and assisted this expansion as a matter of policy, for Europe's textile industry is basic to its people's needs and to the economies of the individual countries—so much so that a primary postwar aim was to set the spindles and looms to work again. Textile output could provide goods to ease the pent-up domestic demand and earn badly needed foreign exchange.

Raw material, however, was a serious problem. Cotton was in short supply, and many countries could get it only by spending foreign exchange. This fact gave rayon an advantage, for wood pulp from European and African forests could provide much of the raw material necessary for its production, without dollar expenditure. True, U.S. Government programs helped move cotton to Europe from the early postwar period on—first the early U.S. Army relief programs, then the Marshall Plan, and later, Public Law 480. Yet many of the West European countries kept strict control over cotton imports, so that manufacturers found it less difficult to buy rayon staple.

Price, too, had a strong influence on the growth of the manmade fiber industry. Before the war, cotton was cheaper than rayon staple in most countries; after the war, the world price of cotton rose sharply, and rayon staple cost less than cotton in nearly every producing country.

Meanwhile, the West European countries had already achieved a striking increase in their capacity to produce rayon staple. A further expansion was encouraged by the Korean crisis, bringing with it a sharply increased demand for textiles just when cotton supplies were low and prices rising. Plant capacity of rayon staple showed a dramatic growth by the end of 1952.

Since that time, Western Europe's production of all fibers has increased steadily, except for the "textile depression" year of 1958. Before World War II, average annual output was only 708 million pounds; by 1959, the volume had reached 2.5 billion. Rayon staple alone accounted for 283 million pounds in the earlier period and 1.3 billion in 1959.

More than half the total output in 1959 was rayon staples, about a third, rayon filament yarns; and the rest, new noncellulosic fibers (acrylics like Orlon, polyamides like nylon, polyesters like Dacron, and textile glass).

The rise of these newer fibers, plus improvements in the properties of the older ones, projected manmade fibers into uses not previously possible and moved them into more direct competition with natural fibers, on the basis of characteristics as well as price.

About half the rayon staple produced in Western Europe is used in the cotton spinning system, and this fiber, in the standard grade and length, is cotton's closest competitor from the standpoint of price and end-uses. Price is, of course, based largely on production costs, which for the West European rayon industry are believed to have ranged from about 20 to 23 cents per pound in 1958 and 1959. These low costs have permitted low selling prices—generally, low enough to permit a substantial price differential.

Maintaining a sizable price spread seems to be a definite policy among West Europe's rayon producers. Otherwise, it would be difficult to see why West European rayon staple prices followed cotton prices downward in 1959, at a time when rising production costs both in Western Europe and the United States were pushing the prices of many manmade fibers upward.

### Consumption Trends

Between 1938 and 1957, average per capita fiber consumption went up by nearly a third; but cotton's share of the gain was smaller than that of manmade fibers. In 1938, cotton represented almost 60 percent of the 15 pounds consumed per capita; manmade fibers, 19 percent. By 1957, the total was nearly 20 pounds, of which cotton was 54 percent and manmade fibers 28.

In a number of countries, however, cotton seems to be staging a comeback. Higher levels of living have stepped up consumer demand for all kinds of textiles. Meanwhile, cotton promotion programs have dramatized both cotton's inherent qualities and special finishes—particularly shrinkage control and easy care. Lower cotton prices have lessened the cost advantage of rayon staple. And finally, most countries have liberalized cotton imports.

As per capita consumption of all fibers rises in Western Europe, it is probable that cotton's share will rise too, and that cotton will recover some of the ground lost since 1938. To achieve these goals, however, three conditions are needed: Prices that are attractive in relation to those of rayon staple; continued promotion of cotton for all kinds of products; and continued research in all phases of the industry.

## Our Dwindling Lard Markets

*(Continued from page 8)*

tariff on lard, and the new tariff instead of being 5 percent ad valorem is now a specific duty of 15 yen per kilo (U.S. $0.16 per pound). This is equivalent to approximately 14 percent ad valorem at current market prices. When the new tariff went into effect, the government moved to allow unlimited imports, but even so, this tariff may cut our shipments to Japan.

The Latin American countries can be crossed off as possible lard markets —at least, for the present. The trend in this area is to foster the production of vegetable oils; consequently, Mexico and Venezuela, once good markets for U.S. lard, have placed restrictions on its entry. Many of the other countries have trade restrictions too. Peru, one of the few that do not, is now buying lard from the Netherlands, so that our exports to that country have slipped from a 13-million-pound average in 1951-55 to 1 million pounds last year.

Even with this brief review of the world lard trade, the conclusion is quite obvious: Unless some drastic change takes place, the United States may soon find itself with all of its lard "in one basket"—namely, the United Kingdom. This country will undoubtedly continue to be a good customer for U.S. lard, to some extent making up for the loss of our other markets; but the one-basket situation, as the old proverb implies, is a dangerous one and does not promise a very healthy future for our lard exports.

# 5,000-Mile "Dingo" Fence Guards Australian Sheep

Right, part of 5,200-mile fence being built by three Australian States to protect their sheep from dingoes. Above, aborigine holds tame dingo pup; it will turn wild at 18 months.

Photographs from Australian News and Information Service

Barrier crosses South Australia, runs along New South Wales border, and makes a loop through Queensland. Dingo was nearly extinct when arrival of rabbit provided basic food. Right, Queensland dog helps yard sheep.

## New Danish Milksheds Are To Lower Costs 30 Percent

Cooperative milksheds are Denmark's latest effort to recombine land and livestock units to raise man-hour productivity in the country's $303.6 million-a-year dairy industry.

Danish farms were broken up in 1899, years before machinery and modern methods made the large farm a more economical unit. Denmark now has approximately 200,000 farms of an average 38-acre size, with 7.5 cows to the farm. Only 20 percent of the dairy farms have more than 20 cows.

Designed primarily to help the small farmer, the sheds will reproduce milking conditions which used to exist on large estates. Danish dairy officials believe the new milksheds, which can handle as many as 240 cows at a time, will reduce milking costs by up to 30 percent.

In the United States so-called cow "pools" began 15 years ago in Beaver County, Utah. In 1959, the number had grown to 13, and another 11 were then planning to begin operation. U.S. pools range from an operation where 1 man milks the cows of 2 to 3 neighbors to pools involving 800 to 1,000 cows owned by 50 to 60 farmers.

## Cotton Sparks Rise in '60 U.S. Farm Sales to Germany

U.S. agricultural exports to West Germany—including West Berlin—rose 20 percent in 1960, the largest hike since 1957. Cotton, coarse grains, and soybeans accounted for more than 60 percent of total sales.

Just as in 1957, a peak year, bigger cotton sales were principally responsible for the increased total—though West Germany's cotton purchases from the United States in 1960 were about half those of 1957. West Germany spent $83.9 million of its 1960 cotton money in the United States, $154.9 million elsewhere—chiefly in Mexico, Turkey, and Brazil.

West Germany's growing livestock industry was largely accountable for the next largest purchases of U.S. farm products: $70.8 million of coarse grains and $70.1 million of soybeans.

Purchases of U.S. bread grains fell almost $14 million (49.2 percent) in 1960 because of a bumper German wheat crop and big Canadian imports.

As a result of less restrictive import controls, U.S. poultry sales to Germany in 1960 almost doubled those of 1959, when the United States made its first dent in the West German market.

## World Sheep Totals Off As Aussies Hit World Record

Drought in Asia was principally responsible for the 4-million drop in world sheep numbers in 1960. Hardest hit was Syria; it has lost 50 percent of its sheep in the past 2 years and is expecting large losses this year.

But the world total of 976 million head in early 1961 was still above the 1951-55 average of 848 million. Australia, the world's largest sheep producer (and wool exporter), reached a world record total of 156.5 million.

Egypt, escaping the drought that cut African herds in 1959, chalked up a 13-percent gain, 1960's largest.

Increasing wool prices and decreasing lamb and mutton prices should send world sheep totals up again in 1961-62.

New Zealand lamb and mutton, formerly sold only to the United Kingdom, is finding increasing acceptance in the United States.

Both New Zealand and Australia, however, are concerned lest the U.K.'s growing number of sheep (a 4-percent increase in 1960) lessen the demand which has made that country the world's big wool, lamb, and mutton importer.